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EXAMINER

CECIL, TERRY K

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 02/04/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/758,625

Applicant(s)

ECHOLS ET AL.

Examiner

Mr. Terry K. Cecil

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 38-54 and 68-83 is/are pending in the application.
- 4a) Of the above claim(s) 38-54 and 68-83 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9, 11.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____.

DETAILED ACTION***Claim Rejections - 35 USC ' 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

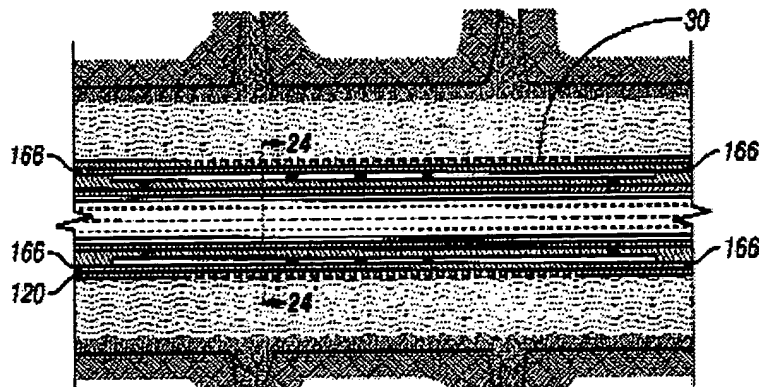
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 7 and 9-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Brockman (U.S. 6,505,682 B2). As disclosed in col. 2, Brockman teaches at least one line embedded in a sidewall of a well screen.

45 cation with downhole tools. By embedding the communication infrastructure within the casing 21, the infrastructure is protected from being damaged by contact with other objects (e.g., a production tubing or sucker rods used to actuate a downhole pump) inside of a central passageway of
50 the casing 21.

Figures 23 and 10 are reproduced below.



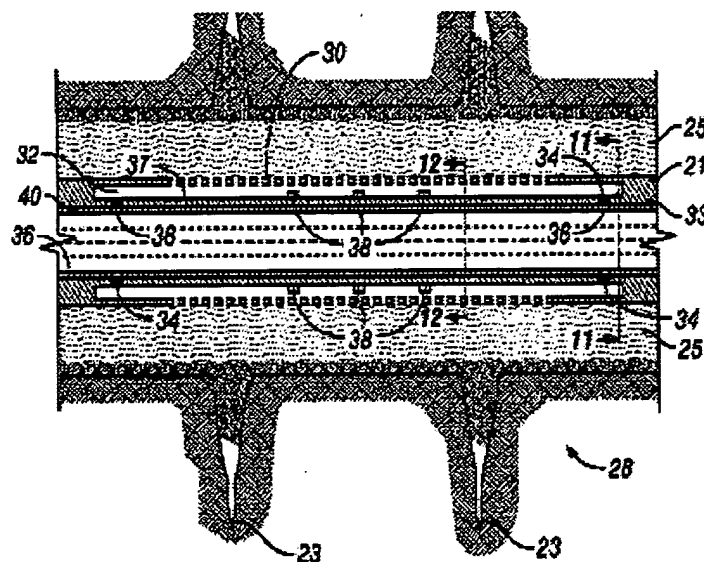


FIG. 10

As shown above, line 166 of Brockman is embedded in the sidewall 33 of the well screen [as in claim 1] and extends longitudinally therein [as in claim 2] wherein the sidewall material can be nonmetallic (i.e. plastic) or a be a composite [as in claims 4 and 7] as taught in col. 3 reproduced below.

sealed) to the outer surface of the tubing 40. The encapsulant 33 may be formed from such materials as a plastic or a soft metal (e.g., lead). The encapsulant 33 may also be a composite material. The tubing 40 is formed out of a material (e.g., metal or a composite) that is flexible but capable of structurally supporting of the well bore.

Brockman also teaches sensors 38 [as in claim 9] in communication with a controller (50 or 150) for measuring parameters within or without the well screen [as in claims 10-11] and controlling flow control devices (e.g. pumps or valves 34) [as in claims 13], wherein such devices inherently include an actuating device (e.g. the magnetic part of the solenoid valve) [as in claim 12] and

Art Unit: 1723

wherein the lines can be fluids lines 166, electrical lines 164 and conduit lines 167 and are for monitoring well conditions [as in claims 14 and 15]. See also col. 5, lines 4-19 and 29-50.

As for claim 3, the casing of Brockman can be made of multiple layers and including an encapsulant 301 circumscribing the encapsulant 33, wherein the filtering material 30 would be recessed into the side wall [as in claim 3] as taught in col. 6 reproduced below.

The casing **21** may be laminated by multiple layers. For example, as shown in FIG. 25, another layer of encapsulant **301** circumscribes and is secured to the encapsulant **33**. The
60 encapsulant **301** has embedded shaped charges **300** which might be actuated, for example, by one of the electrical lines **166**.

Claim Rejections - 35 USC ' 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

Determining the scope and contents of the prior art.
Ascertaining the differences between the prior art and the claims at issue.
Resolving the level of ordinary skill in the pertinent art.
Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman in view of Donnelly et al. (U.S. 5,901,789), hereinafter "Donnelly". Claim 8 has the limitation of an expandable filter media. Donnelly teaches an expandable filter media (compare figures 1 and 2) [as in claim 8]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention for the well screen of Brockman to include the expandable media of Donnelly, since Donnelly teaches the benefit of a fairly constant sieve opening size even though the screen be deformed during installation and use (see abstract, col. 1 lines 20-25 and 40-45).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman in view of Jones (U.S. 5,842,516). Claim 5 has the limitation of tubular protective shield lining in flow passages through the sidewall. Jones teaches inserts 29a that are tubular protection flow passage linings [as in claim 5]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the inserts of Jones in the flow passages of Brockman since Jones teaches the benefit of protection from erosion (abstract).

6. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brockman in view of Jordan et al. (U.S. 5,765,756), hereinafter "Jordan". Jordan teaches a jet nozzle flow passage for delivering fluids to a well bore. Figure 2A thereof is reproduced on the next page.

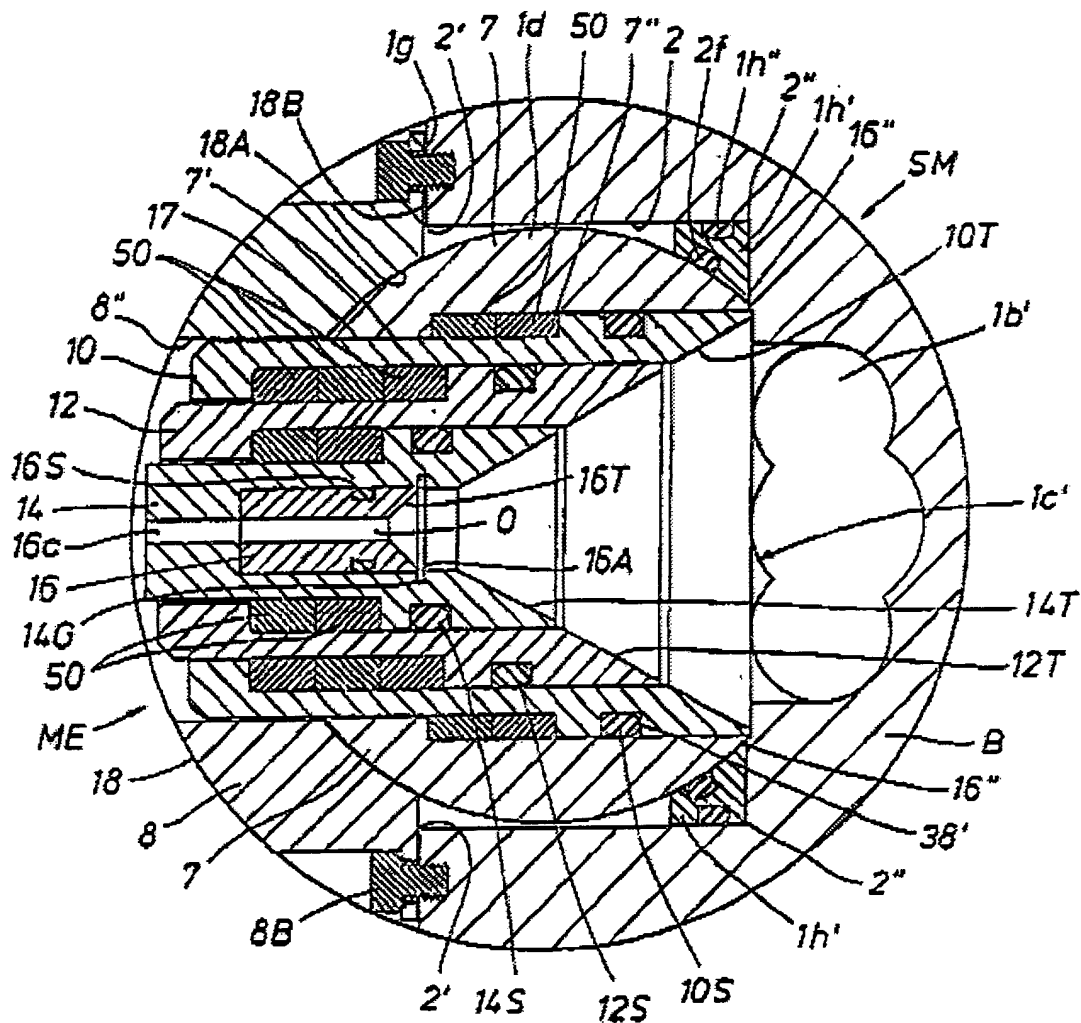


FIG. 2A

As shown above Jordan teaches “tubular protective sleeves” e.g. 10, 12 or 14 in a flow passage [as in claim 5] that includes flexible retainers, e.g. elements 50 [as in claim 6]. It is considered that it would have been obvious to one ordinarily skilled in the art at the time of the invention to have the jet nozzles of Jordan in the sidewall of Brockman, since Jordan teaches the benefit of delivering cleaning chemicals to a well bore (col. 1, lines 5-15 and col. 25, line 65). It is pointed

Art Unit: 1723

out that Brockman teaches fluid lines 166 for delivering chemicals (col. 6, lines 46-56) to the well bore and for communicating with downhole tools (col. 2, lines 40-50) and is therefor conducive to modification by Jordan.

Response to Arguments

7. Applicant's arguments filed 10-9-2002 with respect to the claims have been considered but are moot in view of the new grounds of rejection.

Election/Restrictions

8. Applicant's election of Species I, claims 1-15 in Paper No. 13 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)) and the restriction requirement is made FINAL.

Art Unit: 1723

9. Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (703)305-0079 for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:00a to 4:30p, on at least four days during the week M-F.
- The group receptionist can be reached at (703)308-0661 for inquiries of a general nature or those relating to the status of this or proceeding applications.
- Wanda Walker, the examiner's supervisor, can be reached at (703)308-0457 if attempts to reach the examiner are unsuccessful.
- Fax numbers for this art unit are as follows:
 - i. (703)872-9310 for *official* faxes (i.e. faxes to be entered as part of the file history) that are not after-final; and
 - ii. (703)872-9311 if after-final.

Examiner Terry Cecil
A.U. 1723

TKC

January 28, 2003